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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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7590

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EXAMINER

FERGUSON, MICHAEL P

ART UNIT

PAPER NUMBER

3679

DATE MAILED: 08/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/092,767

Applicant(s)

KRESS ET AL.

Examiner

Michael P. Ferguson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 6-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other: .

DETAILED ACTION

Claim Objections

1. Claims 6, 11, 12, 15 and 18 are objected to because of the following informalities:

Claim 6 (line 3) recites "a shoulder". It appears the applicant intended to recite --at least one shoulder--.

Claim 11 (line 2) recites "outside diameter". It should recite --inside diameter--.

Claim 12 (line 2) recites "threaded sections". It should recite --threaded section--.

Claim 12 (line 4) recites "threaded sections". It should recite --threaded section--.

Claim 12 (line 6) recites "threaded section". It should recite --threaded sections--.

Claim 15 (line 3) recites "tool pieces". It should recite --tool piece--.

Claim 18 (line 2) recites "outside diameter". It should recite --inside diameter--.

For the purpose of examining the application, it is assumed that appropriate correction has been made.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 6-8, 11-15 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Naegeli (USPN 2,935,767).

As to claim 6, Naegeli discloses a device for connecting two tool parts configured for receiving a threaded spindle, each of the tool parts having an associated threaded area, and wherein the device has:

a threaded spindle **3** having a shoulder **14**, the shoulder having an outside diameter which is smaller than the interior diameter of the associated threaded area of one of the tool parts **1,2**.

As to claim 7, Naegeli discloses a device wherein a threaded spindle **3** has a shoulder **14** at each end.

As to claim 8, Naegeli discloses a device wherein the outside diameter of a shoulder **14** at each end is smaller than the interior threads **11,13** of an associated threaded area of a corresponding tool part **1,2**.

As to claim 11, Naegeli discloses a device wherein a shoulder **14** of a threaded spindle **3** is adapted to the inside diameter of an associated threaded area **11,13**.

As to claim 12, Naegeli discloses a connection for connecting two tool pieces, the connection having:

a first tool piece **2** having a threaded area **13** for receiving a threaded section of a threaded spindle;

a second tool piece **1** having a threaded area **11** for receiving a threaded section of a threaded spindle;

a threaded spindle **3** having a pair of threaded sections (a first threaded section being defined within the first tool piece **2**, and a second threaded section being defined within the second tool piece **1**) for engaging the threaded areas of the first tool piece

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and the second tool piece, and wherein the threaded spindle has a projection **14** extending beyond one of the threaded sections for guiding the threaded section into the threaded area of one of the first tool piece and the second tool piece.

As to claim 13, Naegeli discloses a connection wherein a second tool piece **1** partially nests within a first tool piece **2**.

As to claim 14, Naegeli discloses a connection wherein a threaded spindle **3** has a shoulder **14** at each end.

As to claim 15, Naegeli discloses a connection wherein the outside diameter of a shoulder **14** at each end is smaller than the interior threads **11,13** of an associated threaded area of a corresponding tool piece **1,2**.

As to claim 18, Naegeli discloses a connection wherein a shoulder **14** of a threaded spindle **3** is adapted to the inside diameter of an associated threaded area **11,13**.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oshnock et al. (USPN 5,173,017) in view of Naegeli.

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As to claim 6, Oshnock et al. discloses a device for connecting two tool parts configured for receiving a threaded spindle, each of the tool parts having an associated threaded area, and wherein the device has a threaded spindle **225** (Figures 3-6).

Oshnock et al. fails to disclose a device having a threaded spindle having a shoulder, the shoulder having an outside diameter which is smaller than the interior diameter of the associated threaded area of one of the tool parts.

Naegeli teaches a device for connecting two tool parts configured for receiving a threaded spindle, each of the tool parts having an associated threaded area, and wherein the device has:

a threaded spindle **3** having a shoulder **14**, the shoulder having an outside diameter which is smaller than the interior diameter of the associated threaded area of one of the tool parts **1,2**; the shoulders enabling the spindle to be more easily inserted into and aligned within a tool piece and preventing the spindle from being screwed too far into the tool piece, ensuring proper engagement between the spindle and a first tool piece and a second tool piece (column 2 lines 1-9).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a device as disclosed by Oshnock et al. to have a spindle having a shoulder as taught by Naegeli to enable the spindle to be more easily inserted into and aligned within a tool piece and preventing the spindle from being screwed too far into the tool piece, ensuring proper engagement between the spindle and a first tool piece and a second tool piece.

As to claim 7, Naegeli teaches a device wherein a threaded spindle **3** has a shoulder **14** at each end.

As to claim 8, Naegeli teaches a device wherein the outside diameter of a shoulder **14** at each end is smaller than the interior threads **11,13** of an associated threaded area of a corresponding tool part **1,2**.

As to claim 9, Oshnock et al. discloses a device wherein threaded sections **270,275** of a threaded spindle **225** have opposing orientation and are assigned to corresponding threaded areas of tool parts **230,200,10** (column 6 lines 41-44).

As to claim 10, Oshnock et al. discloses a device wherein threaded sections **270,275** of a threaded spindle **225** have differing outside diameters and that threaded areas of tool parts **230,200,10** have correspondingly adapted interior diameters (Figure 3)

As to claim 11, Naegeli teaches a device wherein a shoulder **14** of a threaded spindle **3** is adapted to the inside diameter of an associated threaded area **11,13**.

As to claim 12, Oshnock et al. discloses a connection for connecting two tool pieces, the connection having:

a first tool piece **230** having a threaded area for receiving a threaded section of a threaded spindle;

a second tool piece **200,10** having a threaded area for receiving a threaded section of a threaded spindle;

a threaded spindle **225** having a pair of threaded sections **270,275** for engaging the threaded areas of the first tool piece and the second tool piece (Figures 3-6).

Oshnock et al. fails to disclose a connection having a threaded spindle having a projection extending beyond one of the threaded sections for guiding the threaded section into a threaded area of one of a first tool piece and a second tool piece.

Naegeli teaches a connection for connecting two tool pieces, the connection having:

a first tool piece **2** having a threaded area **13** for receiving a threaded section of a threaded spindle;

a second tool piece **1** having a threaded area **11** for receiving a threaded section of a threaded spindle;

a threaded spindle **3** having a pair of threaded sections (a first threaded section being defined within the first tool piece **2**, and a second threaded section being defined within the second tool piece **1**) for engaging the threaded areas of the first tool piece and the second tool piece, and wherein the threaded spindle has a projection **14** extending beyond one of the threaded sections for guiding the threaded section into the threaded area of one of the first tool piece and the second tool piece; the projections enabling the spindle to be more easily inserted into and aligned within a tool piece and preventing the spindle from being screwed too far into the tool piece, ensuring proper engagement between the spindle and the first tool piece and the second tool piece (column 2 lines 1-9).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a connection as disclosed by Oshnock et al. to have a threaded spindle having a projection extending beyond one of the threaded sections as

disclosed by Naegeli to enable the spindle to be more easily inserted into and aligned within a tool piece and preventing the spindle from being screwed too far into the tool piece, ensuring proper engagement between the spindle and a first tool piece and a second tool piece.

As to claim 13, Oshnock et al. discloses a connection wherein a second tool piece **200,10** partially nests within a first tool piece **230** (Figure 6).

As to claim 14, Naegeli teaches a connection wherein a threaded spindle **3** has a shoulder **14** at each end.

As to claim 15, Naegeli teaches a connection wherein the outside diameter of a shoulder **14** at each end is smaller than the interior threads **11,13** of an associated threaded area of a corresponding tool piece **1,2**.

As to claim 16, Oshnock et al. discloses a connection wherein threaded sections **270,275** of a threaded spindle **225** have opposing orientations and are assigned to corresponding threaded areas of tool pieces **230,200,10** (column 6 lines 41-45).

As to claim 17, Oshnock et al. discloses a connection wherein threaded sections **270,275** of a threaded spindle **225** have differing outside diameters and threaded areas of tool pieces **230,200,10** have correspondingly adapted interior diameters (Figure 3).

As to claim 18, Naegeli teaches a connection wherein a shoulder **14** of a threaded spindle **3** is adapted to the inside diameter of an associated threaded area **11,13**.

Conclusion

The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure. The following patents show the state of the art with respect to threaded spindles:

Redinger (USPN 1,615,233), Hart (USPN 2,005,498) and Liang et al. (USPN 4,549,615) are cited for pertaining to threaded spindles having at least one shoulder.

Berner (USPN 4,629,374) is cited for pertaining to threaded spindles having threaded sections having different diameters.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Ferguson whose telephone number is (703)308-8591. The examiner can normally be reached on M-F (7:30-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H. Browne can be reached on (703)308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9326 for regular communications and (703)872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1114.

MPF
July 24, 2003


Lynne H. Browne
Supervisory Patent Examiner

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